

REMARKS

Favorable reconsideration is respectfully requested.

The claims are 1 to 8 with claims 3 to 5 being withdrawn from consideration.

The above amendment is responsive to points set forth in the Official Action.

In this regard, the preferred mixing ratio of component (A) and (B) based on the description of paragraph [0016] of the specification has been incorporated in claim 1.

The significance of this amendment will be discussed below.

Claims 1, 2 and 6 to 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimura et al. (EP 1101760) in view of Auler et al. (WO 00/03592).

This rejection is again respectfully traversed.

Claim 1, as above amended, relates to a herbicide composition containing, as effective ingredients:

(A) 2-[(4,6-dimethoxypyrimidin-2-yl)hydroxymethyl]-6-methoxymethyl-N-difluoromethanesulfonylanilide (hereinafter referred to as pyrimisulfan); and

(B) 4-(2-chlorophenyl)-N-cyclohexyl-N-ethyl-4,5-dihydro-5-oxo-1H-tetrazole-1-carboxamide (hereinafter referred to as fentrazamide), in combination.

The ratio of (A) to (B) is specified based on the preferred amounts set forth in paragraph [0016] of the present specification.

The rejection alleges:

that pyrimisulfan and fentrazamide are disclosed by Yoshimura et al. and Auler et al., respectively;

that the respective compounds are herbicides used for the same purpose, i.e. for paddy fields;

that combining herbicides is well known in decreasing the factor of resistance in crops such as rice; and

thus concludes that it is *prima facie* obvious to combine two compounds, each of which is taught by the prior art to be useful for the same purpose, into a new composition.

It could perhaps be argued that, in the case where the two compounds, when used singly, exhibit the same activity as herbicides, the use of them in combination would result in additive herbicidal effects.

However, common herbicides exhibit specific activities, and provide various effects depending on the cultivated crops to which they are applied, types of weeds to be removed, types of compounds used as the respective ingredients, mixing ratio between the compounds, and combination of the compounds. Further, a herbicide does not always provide an additive or synergistic effect when it is prepared by combining different types of herbicidal compounds, even though the herbicidal compounds can be used for the same purpose. Therefore, it cannot be obvious that herbicide compositions, which contain herbicidal compounds to be used singly for the same purpose in combination as stated above, decrease the factor of resistance in crops or improve herbicidal effect.

The above-mentioned additive or synergistic effect could better be understood by making reference to the results obtained in Test Example 1 described in the present specification.

The single use of fentrazamide, anilofos, pyributicarb or oxaziclomefone as the component (B) exhibited substantially no effect or, even if any, a small effect against weeds including heart shape false pickerelweed [*Monochoria vaginalis* (MO)], rock bulrush [*Scirpus juncoides* (Si)], tidalmarsh flatsedge [*Cyperus serotinus* (Cy)] and URIKAWA [*Sagittaria pygmaea* (Sa)], while the combination use of pyrimisulfan used as the component (A) and any one of the above-mentioned components (B) provides higher herbicidal effect as compared with the single use of pyrimisulfan, as shown in Table 2 on page 13 of the specification.

Further, pyrimisulfan and fentrazamide, when used in combination at a mixing ratio of 1:15, can substantially completely remove all of the above-mentioned weeds, but provide reduced herbicidal effect against Mo and Sa when the mixing ratio is increased to 1:30. Pyrimisulfan and benzobicyclon, when used in combination at a mixing ratio of 1:10, completely remove all of the weeds, but provide reduced herbicidal effect against Ec, Cy and Sa when used at a mixing ratio of 1:20.

As seen from Table 2, even when the same compound, i.e. pyrimisulfan, is used, the herbicidal effect obtained varies depending on the types of compounds to be used in combination therewith and mixing ratios. Thus, the present invention as claimed in claim 1 cannot be obvious from Auler et al. which merely disclose a herbicide containing, as an effective ingredient, phenoxysulfonyl urea having a structure completely different from that of pyrimisulfan.

In the present invention, the use of pyrimisulfan and fentrazamide in combination promotes the development of herbicidal effect and rapidly attains removal of weeds as compared with the single use of the respective compounds, and further provides high herbicidal effect which is unpredictable from the herbicidal effects of the respective compounds (see paragraphs [0009] to [0012] of the present specification).

In addition, Auler et al. merely disclose a broad range from 1:20000 to 200:1, preferably, 1:8000 to 100:1 or, especially preferably, 1:4000 to 50:1 as a mixing ratio between phenoxysulfonyl urea and another ingredient (see Abstract of Auler et al.). Thus, it is impossible to select the suitable range, which is effective against weeds, of 1 to 15 parts by mass of the component (B) per 1 part by mass of the component (A), from these teachings.

Therefore, the rejection, disregarding the specificity of the herbicidal compound, especially, pyrimisulfan, when used in combination with another herbicidal compound, improperly concludes that the composition comprising two ingredients in combination would be obvious.

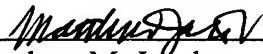
For the foregoing reasons, the rejection on the combined reference teachings is untenable and should be withdrawn.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting for prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

Hiroshi KAWASAKI et al.

By: 
Matthew M. Jacob
Registration No. 25,154
Attorney for Applicants

MJ/aas
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
March 20, 2008